FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	New Project fFORT WHITE	Builder Name:	JERRY LERNER
Street:		Permit Office:	
City, State, Zip:	FORT WHITE , FL , 32615	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)			
2. Single family or multiple family	Single-family			
3. Number of units, if multiple family	1			
4. Number of Bedrooms	2			
5. Is this a worst case?	No			
6. Conditioned floor area above grade (ft²)	1200			
Conditioned floor area below grade (ft²)	0			
7. Windows(80.0 sqft.)	Description		Area	
a. U-Factor: SHGC:	Dbl, U=0.34 SHGC=0.23		80.00	ft²
b. U-Factor: SHGC:	N/A			ft²
c. U-Factor: SHGC:	N/A			ft²
d. U-Factor: SHGC:	N/A			ft²
Area Weighted Average Overhang Depth:			1.500	ft.
Area Weighted Average SHGC:			0.230	
8. Floor Types (1200.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	1200.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

9. Wall Types (1440.0 sqft.)	Insulation	Area	
a. Frame - Wood, Exterior	R=13.0	1440.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²
d. N/A	R=		ft²
10. Ceiling Types (1200.0 sqft.)	Insulation	Area	
a. Under Attic (Vented)	R=30.0	1200.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²
11. Ducts		R	ft²
a. Sup: Attic, Ret: Attic, AH: Main		6	240
12. Cooling systems	kBtu/hr	Efficiency	
a. Central Unit	16.1	SEER:18.00	
13. Heating systems	kBtu/hr	Efficiency	
a. Electric Heat Pump	16.1	HSPF:9.10	
14. Hot water systems			
a. Electric		Cap: 40 gallons EF: 0.960	
b. Conservation features None			
15. Credits		Pstat	

Glass/Floor Area: 0.067

Total Proposed Modified Loads: 32.24

Total Baseline Loads: 36.95

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: Mark Henry Ostertag

DATE: 6-2-20

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT:

DATE: 6-20-20

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL: _____

DATE: _____

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	New Project fFORT WHITE	Bedrooms:	2	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1200	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	JERRY LERNER	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	FORT WHITE , FL , 32615
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1200	10800

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1200	10800	Yes	1	2	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
____	1	Slab-On-Grade Edge Insulatio	Main	160 ft		1200 ft²	----	0.3	0.3	0.4

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
____	1	Hip	Composition shingles	1300 ft²	0 ft²	Medium	N	0.96	No	0.9	No	0	22.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	1200 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	Main	30	Blown	1200 ft²	0.11	Wood

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WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
___	1	N	Exterior	Frame - Wood	Main	13	60	0	9	0	540.0 ft²		0.23	0.55	0
___	2	W	Exterior	Frame - Wood	Main	13	20	0	9	0	180.0 ft²		0.23	0.55	0
___	3	S	Exterior	Frame - Wood	Main	13	60	0	9	0	540.0 ft²		0.23	0.55	0
___	4	E	Exterior	Frame - Wood	Main	13	20	0	9	0	180.0 ft²		0.23	0.55	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N	Insulated	Main	None	.46	3		6	8	20 ft²
_____	2	S	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	1	Vinyl	Low-E Double	Yes	0.34	0.23	N	60.0 ft²	1 ft 6 in	0 ft 0 in	Drapes/blinds	None
_____	2	N	1	Vinyl	Low-E Double	Yes	0.34	0.23	N	10.0 ft²	1 ft 6 in	0 ft 0 in	Drapes/blinds	None
_____	3	S	3	Vinyl	Low-E Double	Yes	0.34	0.23	N	10.0 ft²	1 ft 6 in	0 ft 0 in	Drapes/blinds	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	900	49.41	92.92	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	Split	Singl	HSPF:9.1	16.1 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	Split	Singl	SEER: 18	16.11 kBtu/hr	483 cfm	0.85	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Main	0.96	40 gal	50 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

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DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
_____	1	Attic	6	240 ft²	Attic	60 ft²	Default Leakage	Main	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main